

A Case Study in Sustainable Drainage Systems: Motorway Services, Johnstonebridge, Dumfries & Galloway, Scotland

The Johnstonebridge Motorway Services development comprises a lorry and car park, a petrol filling station, a motel and a restaurant complex. Surface water from the site drains into a man-made loch and then to the River Annan, a high quality salmon and trout watercourse.



Man-made loch, Johnstonebridge.



Motorway Services loch and car park, Johnstonebridge.

The outlet from the loch has been designed so that it can be closed off, for example, in the event of an accident or spillage. In the event of an oil spill at the filling station or in the vehicle parking areas, contaminants can be retained in the loch and removed for disposal elsewhere.



Swans & ducks colonised the loch within a year.



Picnic tables and interpretative signs are along the lake shore.



Outlet from loch provides outflow control.



Landscaping restricts water access thus improves safety.



An attractive waterfall feature enhances amenity value.

The loch is more than just a pollution facility. It is aesthetically compatible with the rural environment and provides great amenity value. Swans have used an island in the loch for nesting and several broods have been raised at the site. Those stopping at the service area can take a walk around the purpose-built path and appreciate the wildlife and scenery.

There is no fencing and the shoreline is buffered with the planting of trees and shrubs which adds to the aesthetic value. A gently sloping shoreline beach feature and the placing of boulders also mitigate against the use of fencing.

Safety issues are further addressed through the provision of safety rings at intervals around the lake perimeter.

